INDEX OF SURGICAL PROGRESS.

GENERAL SURGERY.

I. Experimental Investigation on Transplantation of Mucous Membrane. By E. DJATSCHENKO (Kiev). The first attempt at transplantation of mucous membrane was conducted by Czerny in 1871. From 1873 to 1888 it found practical application, but exclusively in eye troubles. Then Wolfler [v. ANNALS, 1889, January, p. 73-75] published three successful urethral cases, and Schendrikowski, in 1889, one on the cheek. The object of Djatschenko's work was to elucidate the histological process. He experimented on dogs, taking mucous membrane from the mouth and inserting it in place of pieces excised from the eyelid.

The vascular regeneration was in part studied by injecting colored material through the carotid after the pieces had healed down in their new places. The more blood left in the transplanted piece, the more are its vessels thrombosed and the less readily is circulation re-established therein. Complete reunion is established toward the ninth day, no real cicatricial tissue forming. He draws the following practical conclusions:

1. The transplanted piece must lie firmly and intimately against its new base; to this end hæmorrhage must be carefully stopped, the clotted blood carefully removed, and the transplanted piece sufficiently pressed against the wound surface.

2. Before transplantation the piece must be washed off in warm (37-38° C.) .6% salt solution (longer being, up to 1½ hours, in this solution will not act injuriously.

3. The superabundant fat-tissue from the under side of the transplanted piece must be removed by the scissors; still, all the submucous cellular tissue should not be cut away, as otherwise the conditions for

the re establishment of the blood-circulation in the transplanted piece are less favorable.

4. The piece intended for transplantation, as well as the wound-surface, must not be exposed to the action of strong disinfectants; the transplantation should be conducted as aseptically as possible.

5. The transplanted piece ought, if possible, to cover the whole wound-surface completely, as the uncovered portion forms a scar.

6 The transplanted piece must be protected from dessication.—Author's abstract of his prize essay, *Centrbl. f. Med. Wissc.*, 1890, Nos. 35 and 36.

II. Plastic Operations. By Prof. JAS. BRANDT (Klausenburg). In the historical introductory remarks he mentions two personal observations of the rapid reunion of almost completely severed noses (bitten off), and one of the reunion of half a terminal finger phalanx that was brought to him in the patient's pocket.

Some experiments on the swim-membrane of frogs, the mesentery and ear of rabbits, are briefly given to show that tension or pressure greatly interfere with the nutrition of unsevered parts, and may induce gangrene. The like is often shown by unsuccessful operative efforts. Hence to secure a rapid reunion of tissues one of the first and most important conditions is that after the wound-edges are brought together the tension in the tissue-districts involved shall not be immoderate.

The main interest of the paper rests on two cases, one of vesico-vaginal fistula, the other of cicatricial closure of the jaw (anchylostoma).

I. The anterior vaginal and corresponding vesical wall from the neck of the bladder upward over the anterior vaginal arch to the posterior arch, including the portio vaginalis, was absent. Through this defect the vesical mucous membrane, the size of a hen's egg, came down as far as the introitus. The stump of the portio was turned toward the bladder, and not visible, and the posterior cul-de-sac only appeared separated from the prolapsed bladder-membrane by a somewhat ulcerated shallow furrow. The lateral borders of the fistula